HEART

Editorial

Training cardiologists in Europe

Who is a cardiologist? An answer to this question is essential if a common training programme is to be devised in Europe. Yet the answer is very varied. The UK is exceptional in reserving the term for a highly trained specialist, usually with a further research degree, and in scant numbers—approximately 8 per million population. At the other extreme, in some countries the cardiologist has often had minimal training, may be just in outpatient clinical and non-invasive skills, has no research experience, and is in plentiful supply—80 or so per million population. Most countries, such as, France, Germany, and Scandinavia, fall between these two extremes with 20 to 30 cardiologists per million population, all of whom are trained to diagnose and manage the common clinical problems with competence; some will be trained to university or specialist centre standards of expertise.

There is free interchange of labour between the member states of the European economic area (European Union, Norway, Iceland, and Liechtenstein). Criteria by which doctors and specialists can be recognised are therefore necessary. Mutual recognition of the basic medical degree was achieved only after years of deliberation when it was realised that the wide variety of systems for educating doctors all resulted in a rather similar end product; hence the short cut was simply to agree to recognise the medical degrees granted by established schools in other countries. There is no great concern about the capabilities of the basic doctor, although the numbers per 100 000 population do vary from a minimum of 164 in the UK, 196 in Canada, 214 in the United States, 256 in Germany, 314 in France, to 424 in Italy.

How doctors subsequently specialise and gain employment is determined largely by the national health care system. Unemployment and hence the desire to emigrate is however a problem in some countries. The cause varies—for example, unrestricted entry to medical school and a plethora of unrecognised training opportunities as in Italy, or a shortage of posts, as in Germany.

The UK is distinctive in possessing a well developed primary care service with groups of general practitioners responsible for 10–25 000 people. These in turn are supported by a district hospital that may serve some 2–300 000 people and which is still mainly staffed by generalists, approximately half of whom may have a specialist interest in the elderly. Only one or two may devote a substantial part of their time to cardiology and waiting times for their clinics are usually excessive. In Europe, North America, and most of the developed world the situation is very different. Specialist practice dominates, often to the exclusion of the generalist.

Whatever the health care system, a patient who develops cardiac disease should expect specialists to have a level of competence that will enable them to establish a diagnosis and offer a management plan. The specialist must therefore have adequate training, and should undergo continuing medical education. In Europe the body responsible for harmonising and improving the quality of specialist medicine is the European Union of Medical Specialists (UEMS). This body seeks to coordinate the work and recommendations of the 28 recognised monospecialist committees, including cardiology. UEMS advises the Advisory Committee for Medical Training (ACMT), which is the statutory body established in 1975.

The cardiology section of UEMS has two delegates from each European nation, one appointed by the specialist society and the other by professional union. (The current UK representatives are myself and Professor J F Martin.) In many specialties the influence of Brussels has tended to dampen rather than encourage activity, and the deliberations of the monosections are often overshadowed by an energetic specialist society. Within the past decade the European Society of Cardiology (ESC) had become a vigorous scientific organisation with a well attended annual meeting, a thriving journal, and an interest in training and continuing medical education. Members of the cardiology section of UEMS were generally fellows of the ESC, and there was potential overlap of interest. For this reason the two parent bodies, UEMS and ESC, created the European Board for the Specialty of Cardiology (EBSC) in 1992. The Board meets annually on the occasion of the meeting of the ESC and elects an executive committee of 10 members, three cardiologists nominated by the board of ESC, four nominated by the cardiology monosection of UEMS, one cardiologist in training, one representative from the paediatric cardiologists, and one European cardiologist from a non-EU country. This executive committee meets three times a year. The first chairman was Professor Pierre Block, and I succeeded him in 1997.

Recommendations of the EBSC for education and training in basic cardiology in Europe were published in 1996.[1] These correspond to the two years of general professional training and the first three years of the specialist registrar training programme in the UK, with an additional flexible year, making six years in total.

The similarity to the guidelines laid down in the UK reflects our relatively advanced state of organisation of training compared with our colleagues in Europe, and hence our influence on the EBSC. This in turn is due to the existence of the Royal Colleges of Physicians and the Joint Committee on Higher Medical Training (JCHMT). No other country in Europe has the equivalent of the Royal Colleges, which are independent of the state and professional unions and which can assume responsibility for the enforcement of standards. The fact that no other country has an entry examination that must be passed before specialist training can begin (membership of the Royal College of Physicians) is a source of confusion to our colleagues overseas.

From the outset all delegates of the EBSC agreed that the common trunk of two years training in general medicine should be completed before embarking on specialist training in cardiology. The emphasis throughout

the cardiological training programme is on the acquisition of clinical skills but inevitably numbers of procedures had to be recommended. Some of these numbers may appear unachievable in the UK—for example, the recommendation that the trainee "performs" 1000 ECGs. This particular example has to be interpreted liberally. In contrast, the insistence on the numbers of invasive procedures is obligatory and quantifiable. The phrasing of this recommendation caused much difficulty as before 1996 some European countries did not even require their trainees to "gain experience and knowledge" of invasive procedures; nor were the trainees required to "attend personally and participate in at least 150" coronary angiographies. That this requirement was eventually agreed by the EBSC is a tribute to the authority of those cardiologists representing countries that previously had little or no such requirement.

Proposals now being discussed by the EBSC envisage that completion of the training programme will entitle a trainee to be called a "European cardiologist". This title will be recognised by the UEMS and ESC and therefore by cardiologists in Europe. Trainees will be expected to complete a log book that has been devised by Professor M S Nieminen (Helsinki). The credentials committee is likely to be the executive committee of the EBSC. The secretariat and administration will be in European Heart House. Interim arrangements have been discussed and agreed with the conclusion that "all cardiologists in Europe recognised by their national societies who can demonstrate that their training and experience is equivalent to that required by the EBSC will be eligible."

There are inevitably some interesting questions. Who will want to be a European cardiologist? Very few UK graduates will apply, but many trainees in southern and eastern Europe would welcome the status that the title will confer, and the consequent remuneration. How will the training centres and trainers be approved? We do not yet know. Will an exit examination become necessary? This particular question has been the subject of intense discussion and hitherto the EBSC has accorded with the majority view that continuous assessment of training coupled with references from trainers is sufficient evidence of competence. However, other specialists—for example, anaesthetists and urologists, do have exit examinations and for legal reasons these may be necessary in the medical specialties in future.

There is an anomaly in the UK in that the European cardiologist may be considered for entry into specialist registrar six years after registration, whereas the UK graduate takes a minimum of eight years and has to undergo more intensive subspecialty training, including research.[2] Any country in the European Union does, however, have the right to assess the training and experience of a specialist before they can be appointed to a post in that health care system. A European cardiologist applying for a post in the UK National Health Service must be considered for appointment on equal terms with UK graduates. Success, however, is dependent on the view of the advisory appointments committee, which may consider that an extra two years of training are necessary for that particular post, given the peculiarities of the service need in a hospital in this country. All those with a knowledge of European legislation are agreed that this area is a potential minefield. If a European cardiologist were to set up practice in this country it is likely that he or she would not be recognised by the health insurance industry without an NHS appointment.

Our European colleagues do observe that the UK cardiologist is "overtrained" and have difficulty understanding why we expect general physicians with other specialist interests to be responsible for the management of cardiological problems such as unstable angina and endocarditis. They have a point, after all the European cardiologist will be similar to the Canadian or US board certificated cardiologist. If a UK trainee wishes to practise in a European country other than the UK then he or she could do so before completion of the Certificate of Completion of Specialist Training, provided that the European criteria had been fulfilled.

There are continuing areas of discussion. Recertification and continuing medical education is inevitable but the mechanisms need to be defined. The absence of research in the training of the European cardiologist is a matter for regret in some quarters. An alternative point of view is that all cardiologists will in future have sufficient training to enable them to evaluate the results of research. Some trainees have little aptitude for research and an insistence of one year of such training merely dilutes and weakens the research effort of others, particularly at a time when funding is in short supply. Research training, like training in cardiological subspecialties such as intervention and arrhythmias might be best achieved by the granting of a higher degree or subspecialty diploma, topics that are also currently under discussion in the executive committee of the EBSC.

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1 Recommendations of the European Board for the Specialty of Cardiology (EBSC) for education and training in basic cardiology in Europe. *Eur Heart J* 1996;**17**:996–1000.
2 Guidelines for specialist training in cardiology. *Br Heart J* 1995;**73**(suppl 1):1–24.